

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

Unlicensed Use of 6 GHz       )  
band                               )  
  )

FCC Proceeding No. 18-295

**REPLY COMMENTS OF MICROCHIP TECHNOLOGY INC.**

**OVERVIEW**

1. Microchip Technology Inc. (MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality.
2. As a company, MCHP has invested heavily in Ultra-Wide Band (UWB) technology consistent with unlicensed operation under FCC Part 15 Subpart C Section 15.250 and/or under Subpart F to enable distance measurement and positioning/localization systems in the automotive market. This technology finds its application in Passive Entry / Passive Start systems in vehicles today. In addition, other safety related “use cases” are being developed for future automotive applications.
3. Worldwide passenger car sales are projected to be 80 million in 2019. Passive Entry / Passive Start systems have experienced rapid growth in passenger vehicles to the point now where most vehicles produced today have it.
4. It is very important for us and our customers that UWB can continue to operate unhindered. We are very concerned by the proposal in the NPRM and the potential for interference as shown in the coexistence studies submitted by Decawave and the UWB Alliance.
5. Any proposed action to changes to the UWB rules from Part 15, Subpart F for unlicensed devices will:
  - a. Compromise the application of existing UWB distance measurement and positioning / localization solutions
  - b. Expose end consumers in the automotive market to unsafe and insecure vehicle access & start systems by rendering inoperative or even worse intermittent, all existing UWB applications currently utilizing that spectrum.
  - c. Create disruptive business conditions for Microchip Technology.

**CONCLUSION:**

It is the opinion of MCHP that if the Commission should go ahead with the proposed action, unlicensed broadband access systems should be limited in duty cycle and transmit power. We urge the FCC to award only the least amount of spectrum required, at as low a frequency as possible.

Submitted by,

Microchip Technology